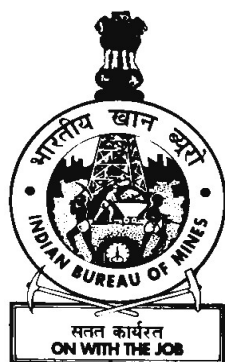


SALT



Indian Minerals Yearbook 2022

(Part- III : Mineral Reviews)

61st Edition

SALT

(ADVANCE RELEASE)

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES**

Indira Bhavan, Civil Lines,
NAGPUR – 440 001

PHONE/FAX NO. (0712) 2565471
PBX : (0712) 2562649, 2560544, 2560648
E-MAIL :cme@ibm.gov.in
Website: www.ibm.gov.in

March, 2024

25 Salt

Salt is the most significant of all the industrial minerals. Occurrence of rock salt in India is scanty. At the time of Independence, there used to be shortfall in production of salt and the same was met through imports. Since then, India has made tremendous progress in production of salt, achieving self-sufficiency in 1953 and even started exporting salt to other countries.

Common salt, when pure, is mineral halite which is an essential item for human consumption. The per-capita consumption of salt in the country is estimated to be about 14 kg, which includes edible and industrial salt. The current annual requirement of salt in the country is estimated to be 63 lakh tonnes for edible use (including requirement for cattles) and 118 lakh tonnes for industrial use.

"Salt is a Central Subject in the Constitution of India and appears as Item No. 58 in the Union List of the 7th Schedule, which reads:

- (a) "Manufacture, Supply and Distribution of salt by Union Agencies; and
- (b) "Regulation and control of manufacture, supply and distribution of salt by other agencies".

The Central Government is responsible for controlling and regulating all aspects of the Salt Industry. The Salt Commissioner's Organisation (SCO), Jaipur, Rajasthan, an attached office under the Ministry of Commerce & Industry (Department of Industrial Policy & Promotion), Government of India, is the Authority entrusted with the above task. The SCO is responsible for monitoring the production, distribution, quality, prices, supply and administration of Salt Cess Act, 1953 and the Rules, made thereunder.

RESERVES/RESOURCES

As per NMI database, based on UNFC system, the total reserves/resources of rock salt as on 1.4.2020 has been estimated at 12.78 million tonnes

in Mandi, Himachal Pradesh. The entire resources, fall under Remaining Resources category.

PRODUCTION AND STOCKS

Production of Rock - Salt was 286 tonnes in 2021-22 decreased by 41% as compared to that in the preceding year. In current year, production was reported by single public sector mine from Himachal Pradesh (Table-1 and 2).

The mine-head closing stocks at the end of 2021-22 was 38 tonnes as against 113 tonnes in 2020-21. The average daily labour employed in Rock - Salt mines during 2021-22 was 34 s as against 23 in previous year (Table-3).

India is the 3rd largest salt (common) producing country in the world after China & USA with a production of about 266 lakh tonnes during the year 2021-22.

Production of salt involves extensive use of renewable sources of energy. Weather conditions play an important role in production of salt.

Salt (common) is manufactured mainly by solar evaporation of sea water. Sea salt constitutes about 80% of the total salt produced in the country. Gujarat (85%) was the leading State followed by Rajasthan (6%) and Tamil Nadu (6%) (Table-5). Private Sector contributed significantly in the production of salt and accounted for 97.12% of the production. Public/Joint Sector contributed 1.11% and the rest was from the Co-operative Sector during 2021-22.

The major by-products recovered in the Salt Industry are gypsum, bromine, magnesium chloride, magnesium sulphate, ammonium bicarbonate, soda ash, caustic soda and soda bicarbonate. The average number of labourers employed in the Salt Industry during 2020-21 and 2021-22 were 91,139 and 77,086 respectively.

SALT

Table – 1 : Producers of Rock Salt, 2021-22

Name & address of producer	Location of mine	
	State	District
Hindustan Salt Ltd, B- 427, Pradhan Marg, Malviya Nagar, Jaipur - 302 017 Rajasthan.	Himachal Pradesh	Mandi

**Table – 2 : Production of Rock Salt, 2019-20 to 2021-22
(By States)**

(Qty in tonnes; Value in ₹'000)

Country/State	2019-20		2020-21		2021-22(P)	
	Quantity	Value	Quantity	Value	Quantity	Value
India	130	1447	486	14239	286	6125
Himachal Pradesh	130	1447	486	14239	286	6125

**Table – 3 : Production of Rock Salt, 2020-21 and 2021-22
(By Sectors/States/Districts)**

(Qty in tonnes; Value in ₹'000)

Country/State	2020-21			2021-22(P)		
	No. of Mines	Quantity	Value	No. of Mines	Quantity	Value
India	1	486	14239	1	286	6125
Public Sector	1	486	14239	1	286	6125
Private Sector	-	-	-	-	-	-
Himachal Pradesh/Mandi	1	486	14239	1	286	6125

**Table – 4: Mine-head Closing Stocks of Rock Salt, 2020-21 & 2021-22
(By States/Grades)**

(In tonnes)

Country/State	2020-21	2021-22(P)
India	113	38
Himachal Pradesh	113	38

MINING

In recent development, Drang Mohal (Bhatog) Rock Salt Mine, Village Mohal Bhatog, District Mandi, Himachal Pradesh, of M/s Hindustan Salts has started production and it produced 286 tonnes of rock salt during 2021-22. Mining is carried out by underground semi-mechanised method. The entire mining area is hill (Govt. waste land) region with no forest land cover.

USES

Salt, in addition to its culinary and domestic uses, is also used in meat packing, fish curing & its preservation, dairying, preservation & processing of hides, manufacturing of soaps, detergent & dyestuff, dyeing & finishing of fabrics, refrigeration, glazing earthenware, explosives, leather industries, bakery products, for soil stabilisation, in manufacturing artificial rubber and as wood

preservative. In agriculture, salt is used for treating hay and as a fertilizer for certain crops. In countries with cold weather conditions, salt is used in deicing, i.e., removal of snow and ice, from streets and highways.

Industrial Applications

Salt is an important raw material used in Chemical Industry. It is used in the production of basic chemicals like sodium carbonate (soda ash), caustic soda, hydrochloric acid, chlorine, bleaching powders, chlorates, sodium sulphate (salt cake) and sodium metal. These basic chemicals, in turn, are used in the preparation of various end-products, such as, soaps, detergents, chlorinated hydrocarbons and carbon tetrachloride. Other important applications where salt is widely used are in food processing; as freezing-point depressant in refineries & milk supply schemes; treatment of industrial wastes; purification of drinking water; and manufacture of synthetic indigo, explosives, papers, etc.

The rock salt produced from Mandi mines contains 67.81% NaCl which is not suitable for human consumption as the content of sodium chloride is low from the required 96% NaCl necessary for human consumption. However, this salt finds application as essential supplement in cattle feeds.

Iodised Salt

The SCO is the nodal agency for monitoring the production and quality of iodised salt at the production level and ensuring its equitable distribution in the country. Production of iodised salt continued its progressive trend and the Universal Salt Iodisation (USI), a programme under National Iodine Deficiency Disorder Control Programme (NIDDCP) reached new heights.

Iodised salt is produced by mixing potassium iodate with salt using spray, drip feed, dry mixing and submersion processes. Iodisation of salt is carried out in plants operated by Sambhar Salts Ltd (a subsidiary of Hindustan Salts Ltd), Kharagoda, Gujarat. SCO has facilitated establishment of 518 salt iodisation units including 119 refineries & washeries (152.39 lakh tonnes) with an annual installed capacity of 218.50 lakh tonnes up to March 2022. Production of 67.02 lakh tonnes of iodised salt during 2019-20 and 78.58 lakh tonnes in

2020-21 was reported. During the year 2021-22, the production of refined salt was 55.06 lakh tonnes as compared to 59.11 lakh tonnes during last year 2020-21, The Bureau of Indian Standards (BIS) has revised the specifications of iodised salt and formulated new specifications for refined iodised salt and Vacuum Evaporated iodised salt under IS 7224:2006. BIS has prescribed IS 797:1982 (Reaffirmed 2012) as specification of common salt for chemical industries.

Potassium Iodate Manufacture

Potassium iodate, used for fortifying salt with iodine is produced indigenously, however, iodine, the basic raw material for its production is imported. There are about 13 potassium iodate manufacturing units, registered with the Salt Commissioner.

Statewise production of salt (common) during the year 2021-22 is furnished in Table-5.

Table – 5: Statewise Production of Salt (Common), 2021-22 (By States)

States	(In lakh tonnes) 2021-22
India	266
Gujarat	227.64
Rajasthan	16.90
Tamil Nadu	17.21
Other	4.24

Source: Salt Commissioner, Govt. of India, Jaipur, Annual Report, 2021-22

CONSUMPTION

Salt is extensively used in various industries like Caustic Soda, Soda Ash, Soaps & Detergents, Chemicals, Water softening plants, dyes etc. The Chlor-Alkali Industries, however, are the major consumer of salt. Various industries in the country consumed 108.98 lakh tonnes of salt during the year 2021-22 as against 101.95 lakh tonnes in 2010-21.

TRADE POLICY

Exports of salt have been brought under Open General Licence (OGL) with effect from 25th August, 1987 vide Ministry of Commerce, New Delhi, Export Trade Control

Public Notice No. 26-ETC(PN)/87 dated 25th August, 1987. The Ministry of Commerce, Government of India, vide Notification No. 482(E) dated 25th July, 1991 has exempted certain categories of export from compulsory pre-shipment inspection.

As per Foreign Trade Policy (FTP) 2015-2020, exports and imports of rock salt and common salt (including iodised salt) under Heading no. 2501 are allowed as 'Free'.

FOREIGN TRADE

Exports

During 2021-22, the exports of salt (other than common salt) increased by about 7% to about 8.86 million tonnes from about 8.26 million tonnes in the previous year. Exports were mainly to China (29%), Republic of Korea (23%), Japan (13%) and Qatar (7%), Indonesia (8%) & Vietnam (3% each). On the other hand, the exports of salt rock decreased by about 56% to 139.16 thousand tonnes in 2021-22 from 317.3 thousand tonnes in 2020-21. The exports were mainly

to Bangladesh (38%), Republic of Korea (43%). Exports of salt (other) increased by 10% to 8.72 million tonnes during 2021-22 from 7.94 million tonnes in the previous year. Exports were mainly to China (29%), Republic of Korea (23%), Japan (13%) and Qatar (8%) (Tables-6 to 8).

Imports

The imports of salts (other than common salt) decreased by 29% to 69,549 tonnes in 2021-22 from 98,042 tonnes in the previous year. Imports were mainly from UAE (43%), Iran(47%) and China(2%) under Open General Licence (OGL). Similarly, import of salt rock also decreased by 19% to 42,396 tonnes in 2021-22 from 52,651 tonnes in 2020-21. The imports were mainly from UAE (64%), Pakistan(4%) and Iran (30%). On flipside import of salt (other) decreased by 40% to 27,153 tonnes during 2021-22 from 45,391 tonnes in the previous year. The imports were mainly to Iran (74%),UAE (11%),UK&China (4% each) and Thailand (3%) (Tables-9 to 11).

**Table – 6: Exports of Salt (Other Than Common Salt)
(By Countries)**

Country	2020-21 (R)		2021-22 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	8260913	10571743	8863780	13393717
China	2839885	3092014	2607128	4495218
Korea, Rep of	1835411	2363062	2091035	2502675
Japan	1105471	1389768	1165266	1388618
Qatar	639399	861159	652400	1001344
Indonesia	460373	576752	728745	885075
Bangladesh	329621	459803	410263	743239
Taiwan	228390	272597	377765	450081
Vietnam	140820	175657	230318	393114
Oman	94719	128460	168527	309456
U A E	118294	158016	92158	220049
Other countries	468530	1094455	340175	1004848

Figures rounded off

SALT

**Table – 7: Exports of Salt Rock
(By Countries)**

Country	2020-21 (R)		2021-22(P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	317376	489122	139164	277009
Bangladesh	260222	360285	53847	94008
UAE	27511	34221	182	6503
Korea, Rep of	27150	26485	60600	71750
USA	574	15376	164	14243
Singapore	233	8903	140	6180
UK	166	3962	69	4686
Qatar	120	2295	581	3590
Canada	100	3178	145	11782
Nepal	272	2717	545	5223
Kuwait	151	2026	22235	32934
Other countries	877	29674	656	26110

*Figures rounded off***Table – 8: Exports of Salt (Other)
(By Countries)**

Country	2020-21 (R)		2021-22 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	7943537	10082621	8724616	13116708
China	2839883	3091734	2607128	4495025
Korea, Rep of	1808261	2336577	2030435	2430925
Japan	1105423	1386482	1165245	1386470
Qatar	639279	858864	651819	997754
Indonesia	460373	576752	728745	885075
Taiwan	228390	272597	377764	450010
Vietnam	140820	175657	230148	391730
Oman	94689	127563	168491	308412
Bangladesh Pr	69399	99518	356416	649231
U A E	90783	123795	91976	213546
Other countries	466237	1033082	316449	908530

*Figures rounded off***Table – 9: Imports of Salt (other than Common salt)
(By Countries)**

Country	2020-21 (R)		2021-22(P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	98042	645494	69549	512396
Iran	43373	201965	32983	166575
UAE	43728	195425	30380	200221
USA	260	33875	78	15237
UK	1946	21871	839	12616
Spain	43	21104	67	15679
Thailand	703	20349	870	27008
Germany	684	18554	290	15261
Malaysia	908	18516	285	6249
China P Rp	1606	15275	1007	14692
Germany	684	18554	290	15261
Other countries	4780	88625	2729	24159

Figures rounded off

SALT

**Table – 10: Imports of Salt Rock
(By Countries)**

Country	2020-21 (R)		2021-22 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	52651	252159	42396	258506
UAE	33342	139526	27334	176544
Iran	14293	71350	12724	70553
Malaysia	908	18474	285	6218
Pakistan	3514	12678	1632	3287
Germany	459	8461	—	—
Afghanistan	46	638	150	346
Poland	10	259	—	—
U K	++	19	++	2
Egypt	54	198	271	1535
Belgium	++	1	++	21
Other Countries	25	555	++	++

Figures rounded off

**Table – 11: Imports of Salt (Other)
(By Countries)**

Country	2020-21 (R)		2021-22(P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	45391	393335	27153	253890
Iran	29080	130615	20259	96022
UAE	10386	55899	3046	23677
China P Rp	1606	15275	1007	14692
Netherland	25	451	246	5055
USA	260	33626	78	15237
UK	1946	21852	839	12614
Spain	43	21068	67	15679
Thailand	703	20349	870	27008
Germany	225	10093	290	15261
France	11	9935	21	14699
Other Countries	1106	74172	430	13946

Figures rounded off

FUTURE OUTLOOK

Sambhar Salts Ltd (SSL) approximately produces 2 lakh tonnes of raw salt every year. In addition, approximately 40,000 tonnes of processed salt are also produced.

Schemes are also under preparation to enhance further capacity of raw salt production to 10 lakh tonnes per annum.

Hindustan Salt Limited has awarded the long term contract through open tender for large scale commercial mining of rock salt at Mandi,

Wherein modern Trackless underground mining is proposed to be used to enhance production upto 50,000 MT/annum. This proposal forms a part of Hon'ble PM's vision of Atmanirbhar Bharat wherein it is planned to produce adequate quantity of Himalayan Rock Salt so that complete import of Rock Salt both from Iran and Pakistan gets stopped within 2 years, we also intend to install Salt Refinery for processing of Rock Salt with latest technology as part of contract.